

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

## PCT

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/IN2005/000034

International filing date (day/month/year)  
28.01.2005

Priority date (day/month/year)  
28.01.2004

International Patent Classification (IPC) or both national classification and IPC  
G01N30/86, G01N30/88

Applicant  
COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 b/s(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**International application No.  
PCT/IN2005/000034**10/587904****Box No. I Basis of the opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material:  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing:  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating there has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and Industrial applicability**

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 2-51,53-84

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 2-51,53-84 are so unclear that no meaningful opinion could be formed (*specify*):

**see separate sheet**

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the whole application or for said claims Nos.

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See separate sheet for further details

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1,52
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1,52
Industrial applicability (IA)	Yes: Claims	1,52
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

Reference is made to the following documents:

- D1: WO 02/46739 A (COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH; DADALA, VIJAYA, KUMAR;) 13 June 2002 (2002-06-13)
- D2: MOLNAR I: "Computerized design of separation strategies by reversed-phase liquid chromatography: development of DryLab software" JOURNAL OF CHROMATOGRAPHY A, ELSEVIER, AMSTERDAM, NL, vol. 965, no. 1-2, 2 August 2002 (2002-08-02), pages 175-194, XP004373703 ISSN: 0021-9673
- D3: KARJALAINEN E J ET AL: "Spectrum extraction from hyphenated data (CD-ROM) - MATLAB programs and sample data" JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY, ELSEVIER SCIENCE INC., NEW YORK, NY, US, vol. 9, no. 8, August 1998 (1998-08), page A10, XP004274733 ISSN: 1044-0305

**Re Item III**

**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

Independent claims 1 and 52 of the present application do not meet the requirements of Article 6 PCT, because the wording of that claims is unclear, see Item VIII of the present opinion. The combination of these unclear claims with the large number of 82 dependent claims, which are referring back to unclear claims, furthermore in conjunction with a description of the application that states at least 140 problems underlying the invention on pages 20-40, lead to an extremely large number of possible methods and devices. In fact, the claims contain so many unclear options, variables, possible permutations and provisions that a lack of clarity (and conciseness) within the meaning of Article 6 PCT arises to such an extent as to render a meaningful opinion on the claims impossible. Consequently, the written opinion has been carried out for independent claims 1 and 52.

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Insofar the application can be understood at present (see Items III and VIII), it seems to be related to the analysis of chromatographic fingerprints of botanical drugs.

A similar method was disclosed in D1, cited by the applicant. The main difference between the prior art according to D1 and the present application appears to be an animated representation of the chromatographic fingerprint.

The underlying problem could therefore be regarded as alternative representation of a large amount of chromatographic data.

The proposed solution cannot be regarded as inventive in view of D2 or D3 which disclose the representation of chromatographic elution peaks as animated film.

As a consequence the subject-matter of claims 1 and 52 would not meet the requirements of inventive step (Article 33(3) PCT).

**Re Item VIII**

**Certain observations on the international application**

The subject-matter of present claim 1 is not clear because its wording is vague and unclear.

The wording "constituents ... possessing chemical and medicinal values" is not clear in that the term chemical value has not a well defined meaning in the field of analytical chemistry.

The wording "movable from 0-360 degrees in any axis" is not clear in that it is not clear what is moved and in which direction.

Method step b. is not clear in that it relates to a desired result of predicting properties of an analyte sample without indication of the method steps which are necessary to achieve this

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result.

The subject-matter of present claim 52 is not clear in that it refers to claim 1 which is not clear.

Furthermore the wording polarity and conjugative properties has not a well defined meaning in the field.

The terms in brackets in the claim lead to lack of clarity, because it is not clear whether the features are limiting or not.